

Amendments to the Claims:

The following Listing of Claims replaces all prior versions and listings of the claims in this application.

Listing of the Claims:

1. (Currently Amended) A process for producing a poly(arylene sulfide), which comprises the respective steps of:

(1) a polymerization step of heating and polymerizing at least one sulfur source selected from the group consisting of alkali metal sulfides and alkali metal hydrosulfides and a dihaloaromatic compound in an organic amide solvent (A) after an alkali metal hydroxide is added as needed,

(2) a separation step comprising sifting a of separating a polymer formed from the reaction mixture containing the formed polymer through a screen to separate the polymer from the reaction mixture after the polymerization step,

(3) a washing step comprising bringing of washing the separated polymer separated into contact with an organic solvent (B) comprising a ketone or alcohol to wash the polymer,

(4) a purification step of separating the polymer from a liquid component (C) containing the organic solvent (B) used in the washing step by sifting the polymer and wash medium through a screen after the washing step, recovering the organic solvent (B) from the liquid component (C) by distillation, and thereafter purifying the recovered organic solvent (B) recovered after the washing step by

i) adding an inorganic acid to the recovered organic solvent (B) and then conducting distillation again, or

ii) bringing the recovered organic solvent (B) into contact with activated carbon and then conducting distillation again,

to lower the content of methylamine an alkaline compound mixed therein to be at most 3,000 ppm by weight, and

(5) a step of recycling the purified organic solvent (B) purified through to the washing step of the poly(arylene sulfide).

2. (Cancelled).

3. (Currently Amended) The production process according to claim 1, wherein in the separation step, after the reaction mixture containing the formed polymer formed is sifted through a screen to separate the polymer, a component passed through a the screen and containing the organic amide solvent (A) is separated into a solid component and a liquid component (D1), and an organic solvent (B) is then added to the separated solid component separated to separate the mixture into a liquid component (D2) containing the organic amide solvent (A) and organic solvent (B) and a solid component.

4. (Currently Amended) The production process according to claim 3 2, wherein after the washing step, the organic solvent (B) is recovered from the liquid component (C) or a mixture of the liquid component (C) and the liquid components (D1) and (D2) by distillation.

5. (Cancelled).

6. (Currently Amended) The production process according to claim 1-5, wherein the inorganic acid is hydrochloric acid.

7. (Currently Amended) The production process according to claim 1-5, wherein the inorganic acid is added to the recovered organic solvent (B) ~~recovered~~ to adjust the pH of the organic solvent to lower than 10.0, and the organic solvent (B) thus adjusted is then distilled.

8. - 9. (Cancelled).

10. (Original) The production process according to claim 1, wherein the organic solvent (B) used in the washing step is acetone.

11. - 12. (Cancelled).

13. (Original) The production process according to claim 1, wherein a dehydration step of heating and dehydrating a mixture containing the organic amide solvent, at least one sulfur source selected from the group consisting of alkali metal sulfides and alkali metal hydrosulfides and the alkali metal hydroxide added as needed to control a water content in the mixture is arranged as a step prior to the polymerization step.

14. (Original) The production process according to claim 1, wherein in the polymerization step, the polymerization reaction is conducted by an at least two-stage polymerization process comprising:

(I) Step 1 of heating a reaction mixture containing the organic amide solvent, the sulfur source and the dihalo-aromatic compound to 170 to 270°C in the presence of water in an amount of 0.5 to 2.0 mol per mol of the sulfur source charged to conduct a polymerization reaction, thereby forming a prepolymer that a conversion of the dihalo-aromatic compound is 50 to 98%, and
(II) Step 2 of controlling the amount of water in the reaction system so as to bring about a state that water exists in a proportion of more than 2.0 mol, but up to 10 mol per mol of the sulfur source charged, and heating the reaction system to 245 to 290°C, thereby continuing the polymerization reaction.

15. (Currently Amended) A process for producing a poly(arylene sulfide), comprising the step of washing the poly(arylene sulfide) obtained by a polymerization step in an organic amide solvent (A), with an organic solvent (B) comprising a ketone or alcohol, wherein the organic solvent (B) used in the washing step is recovered and recycled to the washing step of the poly(arylene sulfide), and, upon recycle, the content of methylamine in the organic solvent (B) from the previous washing step the washing is conducted with an organic solvent (B), the content of an alkaline compound in which has been lowered to be at most 3,000 ppm by weight, to provide a poly(arylene sulfide) having a yellow index (YI) of at most 15.0.

16. (Original) The production process according to claim 15, wherein a treatment for raising a crystallization temperature is conducted after the washing with the organic solvent (B) to provide a poly(arylene sulfide) having a crystallization temperature (Tmc) of at least 200°C as measured under temperature-lowering conditions and a yellow index (YI) of at most 11.0.

17. (Cancelled).

18. (Currently Amended) A method for washing a poly(arylene sulfide) obtained by a polymerization step in an organic amide solvent (A) with an organic solvent (B) comprising a ketone or alcohol, comprising recovering the organic solvent (B) used in a washing step to recycle it through the washing step, wherein the content of methylamine an alkaline compound in the recovered organic solvent (B) recovered at that time is lowered to be at most 3,000 ppm by weight to recycle the organic solvent (B) thus treated through the washing step.

19. (Currently Amended) A process for purifying an organic solvent used in washing, which comprises washing a poly(arylene sulfide) obtained by a polymerization step in an organic amide solvent (A) with an organic solvent (B) comprising of a ketone or alcohol, conducting sifting through a screen to separate the polymer from a liquid component (C) containing the organic solvent (B) used in the washing, recovering the organic solvent (B) from the liquid component (C) by distillation, and then adding an inorganic acid to the recovered organic solvent (B), and then conducting recovered to conduct distillation again.